Prepared for: San Jacinto River Fleet, LLC P.O. Box 1559 Channelview, TX 77530

PHASE II ENVIRONMENTAL SITE ASSESSMENT BIG STAR PROPERTY 18001 EAST FREEWAY CHANNELVIEW, HARRIS COUNTY, TEXAS

TWE Project Number 11.12.014

June 2011

Prepared by:

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TWE Inc. Project Number: 10.12.041

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TWE Inc. Project Number: 10.12.041

1 EXECUTIVE SUMMARY

Tolunay-Wong Engineers, Inc., (TWE) was retained by San Jacinto River Fleet, LLC (SJRF), to conduct a Phase II Environmental Site Assessment for the Big Star Property located at 18001 East Freeway in Channelview, Harris County, Texas.

The work was conducted by following, to the extent feasible, processes described in the American Society for Testing and Materials (ASTM) Standard Guide for Environmental Site Assessments: Phase II Environmental Site Assessment Process (ASTM E-1903-97 Reapproved 2002). The locations investigated by the Phase II ESA boring program are based upon the findings presented in TWE's Phase I ESA Report dated May, 30 2011.

Two recognized environmental conditions (RECs) on or near the Site were identified that warranted further investigation. These include the San Jacinto River Waste Pits (SJRWP) Superfund Site located east of Big Star Property and a series of seven ExxonMobil pipelines with an associated valve station passing along the southern part of the property. Available data from third party characterization of the SJRWP Superfund Site along with risk assessment calculations and other factors were used to eliminate impact from the SJRWP as a REC. This resulted in the pipelines being the only REC to be investigated under a Phase II ESA.

The sampling plan consisted of drilling four soil borings to depths ranging from 6 to 9 ft below ground surface (bgs). The boreholes were placed in a line parallel to and at a distance of 25 feet north of the pipeline easement. The line of boreholes spanned the width of the Site. Soil samples were collected on 2-ft continuous intervals and screened for olfactory indications of hydrocarbons and headspace organic vapors. Temporary wells were then placed in each borehole, and groundwater was sampled for total petroleum hydrocarbons (TPH) and benzene/toluene/ethylbenzene/xylenes (BTEX). Groundwater was chosen as the preferred media of investigation because it is be better suited to detecting releases that are somewhat remote from the sample location. Field observations detected no hydrocarbon odors or sheens but did note soil odors that were characteristic of anaerobic conditions in marshes. In support of these observations, analytical results detected no TPH or BTEX constituents that would indicate a release from any of the pipelines.

Based on these findings, TWE has no recommendations for further investigation of Big Star Property.

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2 INTRODUCTION

Tolunay-Wong Engineers, Inc., (TWE) was retained by San Jacinto River Fleet, LLC (SJRF), to conduct a Phase II Environmental Site Assessment for the Big Star Property located at 18001 East Freeway in Channelview, Harris County, Texas.

2.1 BACKGROUND

The locations investigated are based upon the findings documented in TWE's environmental services report titled "Phase I Environmental Site Assessment Big Star Property 18001 East Interstate 10 Channelview, Harris County, Texas". The report was issued to the SJRF on May 30, 2011. The report identified various recognized environmental conditions (RECs) on or near the Site that warranted further investigation. The RECs identified include the San Jacinto River Waste Pits (SJRWP) Superfund Site located east of Big Star Property and a series of seven ExxonMobil pipelines with an associated valve station passing along the southern part of the property. Two pipelines are finished product lines, two are inactive, and three are nitrogen lines.

Available data from third party characterization of the SJRWP Superfund Site were used to evaluate potential impact to Big Star Property. Results of that evaluation indicate that impact to Big Star Property is largely insignificant with one sample location that exhibited an elevated total concentration of dioxins and furans. While the elevated concentration was still below the site specific health criterion, it was identified as a REC because of the potential for deeper concentrations to exceed this criterion. That sample location, however, was excluded as a REC because of its proximity to the recently surveyed mean high water mark and the depth at which the elevated concentrations may extend (>2 ft below ground surface). Of note is the aspect that if the sample location is beyond the mean high water mark, that would place it on "public bottoms" and remove it from liability to any owner of Big Star Property. At the time of the Phase II site reconnaissance, the sample location was observed to be submerged, indicating that it is either beyond the mean high water mark or that it submerged by high tide at the time. This observation led to the conclusion that deeper samples would be below groundwater most or all of the time. As a result, this REC was eliminated on the basis of little or no exposure potential to site workers under day to day activities. Based on these findings presented in the Phase I ESA report, we recommended a Phase II ESA to investigate potential releases from the pipelines and valve station.

2.2 PROJECT LOCATION AND DESCRIPTION

The portion of the Site included in this study is the southern side of the Big Star Property immediately north of the ExxonMobil pipeline easement. See Figure 1-Site Map.

3 PURPOSE

The purpose of this Phase II ESA was to evaluate the RECs identified in the Phase I ESA, specifically to discover, document, and report impacted soil and/or groundwater, if any, adjacent to or near the RECs. This program was designed to evaluate the presence or absence of contaminants at proposed boring locations but not the full extent of contaminated media, if encountered. This was done by following, to the extent feasible, processes described in the American Society for Testing and Materials (ASTM) Standard Guide for Environmental Site Assessments: Phase II Environmental Site Assessment Process (ASTM E-1903-97 Reapproved 2002).

3.1 SCOPE OF WORK

TWE conducted drilling and sampling on June 1, 2011, to evaluate subsurface conditions. TWE drilled a total of four (4) soil borings ranging in depth from 6 to 9 ft below ground surface using a solid stem auger drilling rig. Boring locations are shown on Figure 1.

3.1.1 Sampling Plan

Provision was made for collecting and testing one groundwater sample per boring and if necessary, 2 soil samples. The latter were included in the scope of work in the event that free product was encountered in the soil. None was observed. Otherwise, groundwater was chosen as the preferred medium of investigation because it is be better suited to detecting releases that are somewhat remote from the sample location.

3.1.2 Chemical Testing Plan

The primary focus of a Phase II ESA is to evaluate the potential that an identified REC has impacted environmental media (soil and/or groundwater) through releases of regulated substances, such as hydrocarbons, volatile organic compounds, and semivolatile organic compounds. The RECs identified in the Phase I ESA at the Site are characterized as hydrocarbon-based materials that would encompass the finished products and any products that once flowed through the two inactive lines such as gasoline, diesel, used oil, and crude oil. Based on this, the groundwater samples were tested for total petroleum hydrocarbons (TPH) utilizing Texas Method TX1005 and BTEX by EPA Method 8015.

4 FIELD METHODS AND EXPLORATION

4.1 SOIL BORINGS

Soil borings were logged on 2-ft continuous intervals. Samples were described for lithology, color, odor, and indicators of hazardous materials, and were screened for headspace organic vapors using a photoionization detector. Boreholes were backfilled with soil cuttings and

bentonite chips after completion. All sampling equipment was dedicated so that there was no need to clean between boring locations and no investigation derived waste to dispose.

4.1.1 Location of Sampling Points in Relation to Potential Sources

Boring locations were chosen based on proximity to RECs. Prior to mobilizing a drilling rig to the Site, a TWE professional met with a representative of ExxonMobil to verify the pipelines' locations in the field and to clear sample locations. As per the ExxonMobil representative, a minimum distance of 25 feet was to be maintained between the boring locations and the pipeline easement boundary. On that basis, TWE measured the requisite distance from marker stakes placed by the ExxonMobil representative. The resulting line of boreholes spanned the width of Big Star Property along its southern side. The first boring (SB-01) was placed at the west end of the easement near the valve station, and the next three boreholes were placed at consecutive distances of 100 feet (SB-02), 140 feet (SB-03) and 275 feet (SB-04).

4.1.2 Depths to Pertinent Strata and General Observations

The soils profile generally consists of one to three ft of brown to light brown gravelly sand and clay fill. This was followed by 0 to 4 feet of tan, gray and red silty to sandy clay, and then dark gray sand to total depth. The dark gray sand is believed to be naturally occurring, whereas the overlying multicolored silty to sandy clay is probably fill material. In SB-01 and SB-04, a strong odor was noted. The odor was distinctly characteristic of anaerobic marsh conditions as opposed to hydrocarbon or other chemical constituents. This would suggest that much of the fill may have come from natural, organic rich, river bottom sediments that could have been anoxic or became anoxic after being placed as fill material. Headspace readings listed on the boring logs are recorded to one significant figure and indicate organic vapor readings above background in all three soil units. The PID did not register any readings for the samples in which odors were noted, and the samples for which the PID did register had no odors. Hence, its likely that the PID readings were due to naturally occurring gasses in the soil. Soil boring logs are presented in Appendix A.

4.2 GROUNDWATER SAMPLING

During drilling operations, the depth to first observable groundwater was noted for each boring. Free water was initially encountered at depth ranging from 3.5 to 7 feet below ground surface. Upon reaching groundwater, each soil boring was continued a minimum of two additional feet at which point the borehole was terminated and a well screen was placed into the borehole to prevent collapse while groundwater was being sampled. After allowing the groundwater level to stabilize, final groundwater measurements ranged from 2.21 to 7.94 feet below ground surface. Groundwater samples were then collected using a dedicated polypropylene bailer and new twine for each well. Samples were placed into lab-cleaned glass VOA vials and packed into an ice-filled cooler for transport to the ALS Laboratory Group (ALS) with chain-of-custody documentation.

5 RESULTS OF CHEMICAL ANALYSES

The groundwater sample analytical test results are summarized in Table 1 below, and the analytical test report is contained in Appendix B. The results in Table 1 are compared to TCEQ TRRP Tier 1 PCLs in a residential setting under the groundwater ingestion ($^{GW}GW_{Ing}$) exposure pathway.

Table 1
Groundwater Analytical Summary

	TRRP Tier 1	TRRP Tier 1 Sample ID				
Analyte	GWGW _{Ing} (1)	SB-01	SB-02	SB-03	SB-04 ⁽²⁾	
TPH - TX1005						
C6-C12	0.98	<0.19	<0.20	<0.19	<0.19	
>C12-C28	0.98	<0.19	<0.20	<0.19	0.2	J
>C12-C35	0.98	<0.19	<0.20	<0.19	<0.19	
>C28-C35	0.98	<0.19	<0.20	<0.19	<0.19	
BTEX - 8260						
Benzene	0.005	<0.0005	<0.0005	<0.0005	0.00085	J
Toluene	1	<0.0005	<0.0005	<0.0005	<0.0005	
Ethybenzene	0.7	<0.0005	<0.0005	<0.0005	<0.0005	
Xylenes	10	<0.001	<0.001	<0.001	<0.001	

- (1) Groundwater ingestion pathway
- (2) Bolded results indicate detected compounds

As shown, most groundwater results for BTEX and TPH are non-detect. The groundwater sample from SB-04 shows trace amounts of TPH and benzene. However, these are well below the TRRP residential criteria for groundwater ingestion, and neither is significantly concentrated to indicate a release from the ExxonMobil pipelines.

6 FINDINGS AND CONCLUSIONS

The field observations indicate no presence of hydrocarbons in soil and groundwater. This is largely supported by laboratory analytical results exhibiting only trace concentrations of TPH or BTEX. Based on these data, TWE concludes that there is no evidence of a release from the ExxonMobil pipelines.

7 RECOMMENDATIONS

TWE has no recommendations for further investigation of the Big Star Property.

8 LIMITATIONS AND USER RELIANCE

8.1.1 Limitations of Assessment

The following were excluded from the scope-of-work for the Phase II ESA:

• Radon;

• Lead in drinking water;

• Lead-based paint;

• Geologic faulting;

• Wetlands determination;

• Ecological resources.

8.1.2 Limitations

No ESA can eliminate all uncertainty. Even when Phase II ESA work is executed with an appropriate site-specific standard of care, certain conditions present especially difficult detection problems. Such conditions may include, but are not limited to, complex geological settings, the fate and transport characteristics of certain hazardous substances and petroleum products, the distribution of existing contamination, physical limitations imposed by the location of utilities and other man-made objects, and the limitations of assessment technologies. Furthermore, any sample, either surface or subsurface, taken for chemical analysis may or may not be representative of a larger population.

This Phase II ESA does not purport to include the level of specificity required of technical standards that govern full characterization of a site's environmental conditions. It is not intended to satisfy the level of inquiry that may be necessary to support remedial solutions for a site.

8.1.3 User Reliance

The services described in this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, express or implied, is made. These services were performed consistent with our agreement with our client. This report is solely for the use and information of our client, unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions, recommendations, and conclusions contained in this report apply to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. Environmental conditions may exist at the property that cannot be identified by visual observation. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, or the use of segregated portions of this report.

9 SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

We, the undersigned, declare that, to the best of our professional knowledge and belief, we meet the definition of *Environmental Professionals* as defined in 312.10 of 40 CFR 312 and we have the specific qualifications based on education, training, and experience to assess a *property* of the nature, history, and setting of the subject *property*. We have developed and performed all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR 312.

TWE Project Number 11.12.014

June 3, 2011

Mark Brotherton, P.G. Senior Project Manager

Environmental Services Division

Gand R. World

Paul R. Wild Vice President

Environmental Services Division

10 QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS

The resumes of the environmental professionals who prepared this report are presented below.

MARK BROTHERTON, P.G. SENIOR PROJECT MANAGER ENVIRONMENTAL SERVICES DIVISION

SPECIALIZATION

M.S. Geology; Registered Texas Geoscience Professional and a Certified Project Management Professional. Mr. Brotherton is a geologist with 26 years of experience in the environmental consulting business. His expertise ranges from design and implementation of site investigations and groundwater monitoring programs to remediation of contaminated soil. Clients include Department of Defense as well as private sector and local municipalities. An important component of his project experience is the management of waste streams ranging from investigation derived waste to spill response, SWMU removal waste and remediation waste. The latter has comprised petroleum storage tank releases, as well as pre- and post-RCRA releases of volatile organics, semivolatile organics, pesticides, herbicides, PCBs and metals. Mr. Brotherton is knowledgeable in characterizing and classifying wastes according to federal and state criteria and has managed wastes of various media including soil, groundwater, surface water, pond sludge and demolition debris. He has acted on behalf of the client in profiling, manifesting and directing the transport and disposal of hazardous and nonhazardous waste. In addition, he has directed remediation projects in which recyclable wastes were segregated from disposable waste. An integral part of Mr. Brotherton's waste management experience is compiling and reporting waste transport and disposal records.

PROFESSIONAL HISTORY

Tolunay-Wong Engineers, Houston, TX, 2008 to Present, Environmental Services ECC, Houston, Texas, 2004 – 2008, Sr. Geologist/Project Manager Independent Geologist, 2001 - 2004
TRC Environmental Corporation, 2000 – 2001, Houston, Texas, Sr. Geologist Radian International LLC, 1986 – 1999, Houston, Texas, Sr. Geologist Environmental Research & Testing, 1984 – 1986, Houston, Texas, Geologist

EDUCATION, REGISTRATIONS AND CERTIFICATIONS

Project Management Profession Certification, 2008 Practical Loss Control Leadership Certification, 2006 MS, Geology, Texas A&M University, 1982 BS, Geology, Baylor University, 1978 40-hour HAZWOPER Training

LICENSES AND CERTIFICATIONS

Project Management Professional, (#524528) Texas Professional Geoscientist (PG 2035) LPST Project Manager (No. PM0000082) American Institute of Professional Geologists (AIPG #10636)

PAUL R. WILD VICE PRESIDENT - ENVIRONMENTAL SERVICES DIVISION

SPECIALIZATION

Conducts technical reviews of environmental management systems, and directs environmental compliance audits, risk assessments, environmental site assessments, wetlands delineations and Corps permitting, and asbestos surveys. Manages RCRA Facility Investigations and Corrective Measures Studies. Manages all phases of underground storage tank release evaluations from initial investigation to remediation. Conducts Environmental Assessments under the National Environmental Policy Act. Evaluates analytical testing data and oversees contract laboratory quality asurance, including on-site auditing. Supervises drilling and sampling operations at hazardous waste sites and provides assessment of soil and groundwater contamination. Conducts chemical literature research and assesses waste treatment methods. Evaluate applicable or relevant and appropriate requirements (ARARs) in relation to remedial actions and air/water/waste permitting. Develops health and safety plans and monitors health and safety plan compliance. Evaluates census tract data, property ownership records, aerial photography, house-to-house survey data, and other publicly available data, including interviews with regulatory and governmental agency personnel, to assess possible or probable social and economic impacts to communities from construction and remediation projects.

PROFESSIONAL HISTORY

Tolunay-Wong Engineers, Inc., Houston, Texas, 2002 to Present Washington Group International, Houston, Texas, 1985 - 2002, Manager of Environmental Services Resource Engineering, Inc. (ENSR), Houston, Texas, 1985, Staff Chemist McBride-Ratcliff and Associates, Inc., Houston, Texas, 1984 - 1985, Field Technician

EDUCATION

B.S. Chemistry (Zoology minor): Marshall University, 1983

CERTIFICATION

OSHA Certified for Hazardous Waste Site Work (OSHA 29 CFR 1910.120)

OSHA 29 CFR 1910.120 Supervisor Training

Asbestos Hazard Emergency Response Act (AHERA) building inspector and management planner Illinois Licensed Asbestos Inspector #100-7145

TCEQ Corrective Action Project Manager Reg. #CAPM00385

AFFILIATIONS

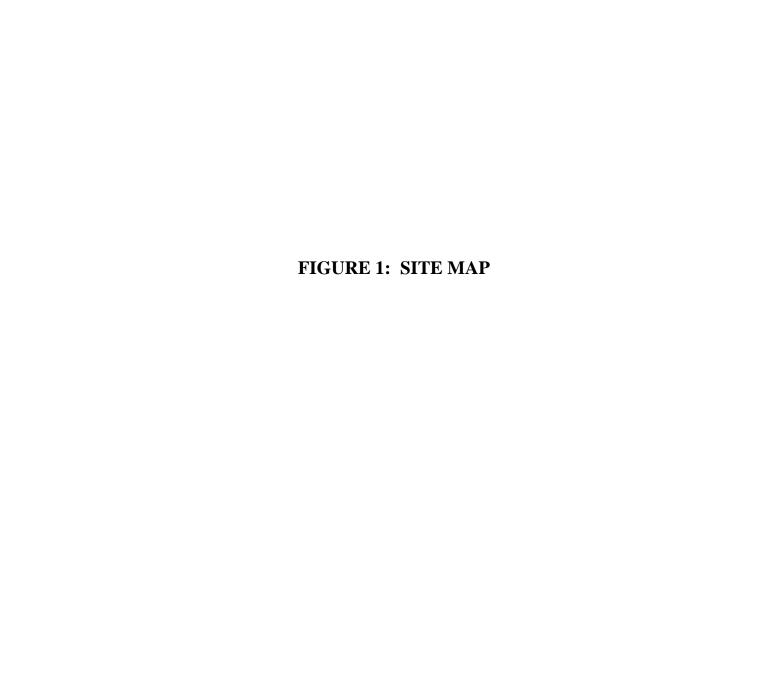
American Chemical Society

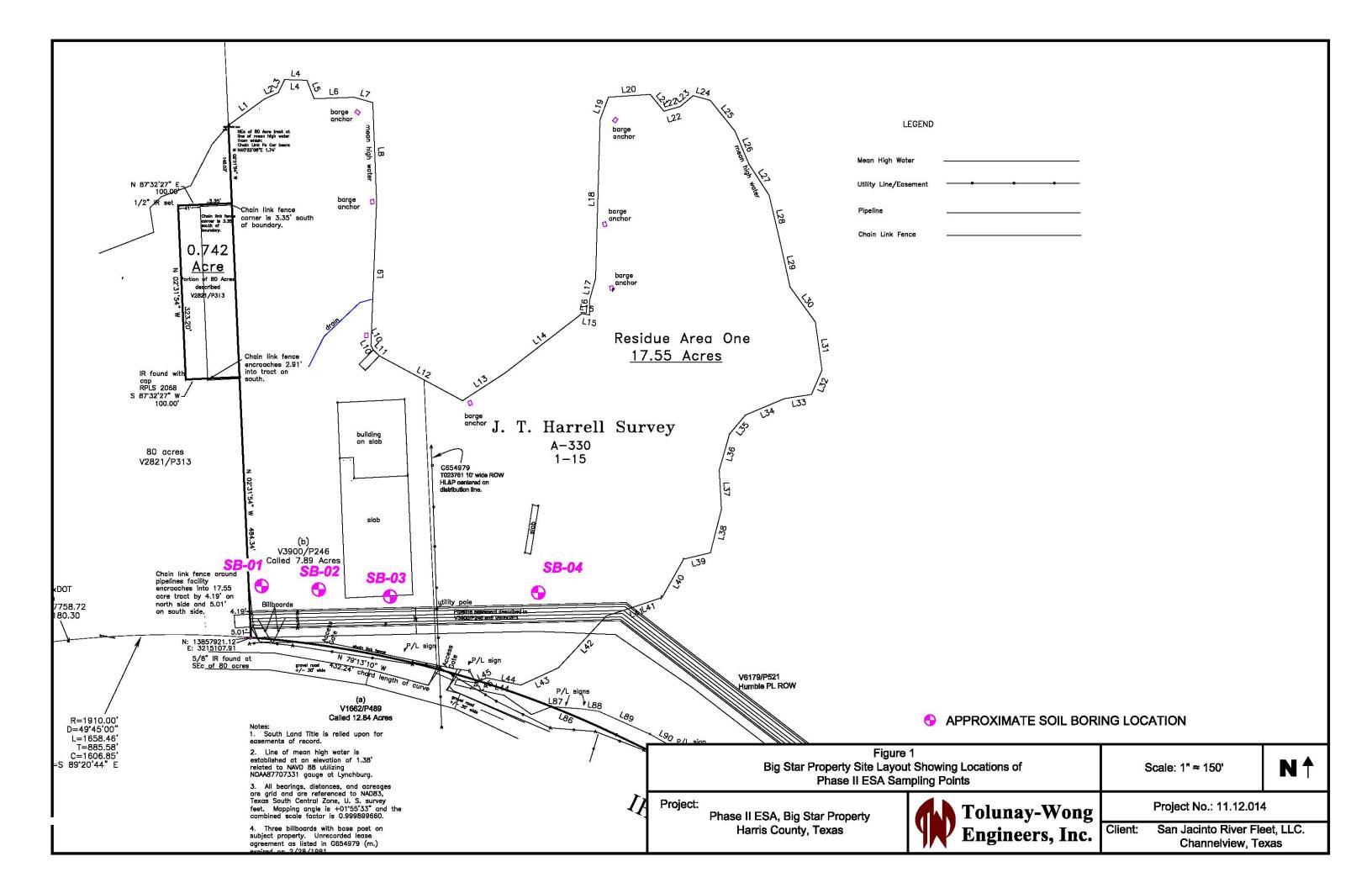
PUBLICATIONS

"A Contaminant-Resistant Slurry Trench," W. R. Tobin, co-author, presented at the First Annual Southern Regional Ground Water Conference, San Antonio, Texas, September 1985, pp. 193-208.

"Attapulgite: A Clay Liner Solution?" W. R. Tobin, co-author, <u>Civil Engineering</u>, Vol. 56, No. 2, February 1986, pp. 56-58.

"The Environmental Site Assessment as a Pre-Investment Security," presented at the Texas Section, American Society of Civil Engineers Spring Meeting, Dallas, Texas, April, 1987.







LOG OF BORING **SB-01**

Project: Big Star Property, 1800 East Frwy, Channel View, Harris County, TX Project No.: 11.12.014 6-1-11

Client: SJRF, P.O. Box 1559, Channelview, TX 77530

ft

Elevation:

Coordinates: Lat. 29°47'46.4"

Long: 95°04'07.5"

Dry Augered: Washed Bored:

to 6 to

Free Water During Drilling at: Water at: 2.21 ft

Caving at:

3.5 ft

ELEVATION/ DEPTH	SOIL/SAMPLER SYMBOLS & FIELD DATA	POCKET PEN. (tsf) or SPT	DESCRIPTION	TPH (mg/kg)	PID (ppm)	BTEX (mg/kg)
<u>-</u> 0	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7		Light brown & brown LEAN CLAY "FILL" w/ gravel		0	
-	× // // // // // // // // // // // // //		Dark gray SAND (SC) -wet @ 3.5'		0	
- 5 -			-saturated below 4.5' -tan, w/ strong natural organic odor @ 5.5'-6' Boring terminated @ 6 ft			
-			Borning terminated & one			
- - 10			·			
-						
-						
- 15 -						
20						
-						
— 25 -						
F						

Note(s): Water sample collected at 20:17

LOG OF BORING **SB-02**

Project: Big Star Property, 1800 East Frwy, Channel View, Harris County, TX Project No.: 11.12.014 6-1-11 Date:

Client: SJRF, P.O. Box 1559, Channelview, TX 77530

Elevation:

Coordinates: Lat. 29°47'46.4"

Long: 95°04'06.3"

Dry Augered: Washed Bored:

0 **to** 6 to

Free Water During Drilling at: Water at: 2.26 ft

7 ft

Caving at:

ELEVATION/ DEPTH SYMBOLS & FIELD DA	PEN. (tsf)	DESCRIPTION	TPH (mg/kg)	PID (ppm)	BTEX (mg/kg)
-		Tan stabilized SAND "FILL" -w/ gravel		0	
		Light gray SANDY LEAN CLAY (CL)		0	
- XXXXX XXXXX - XXXXX - XXXXX - 5 XXXXX		Dark gray SAND (SC) -damp @ 4.5'		1	
— XXXX — XXXX — XXXXX XXXXX XXXXX		-tan SAND (SC) @ 6'-8' -damp to 7' -wet @ 7'		2	
-		Boring terminated @ 8 ft			
- 10					
-					
-					
- - 15					
-					
<u> -</u>					
-					
- 20					
-					1
[
-					

Note(s): Water sample collected at 20:26

LOG OF BORING SB-03

Project: Big Star Property, 1800 East Frwy, Channel View, Harris County, TX **Project No.:** 11.12.014 6-1-11

Client: SJRF, P.O. Box 1559, Channelview, TX 77530

Elevation:

Coordinates: Lat. 29°47'45.5"

Long: 95°04'01.7"

Dry Augered: Washed Bored:

0 **to** 6 **ft to** ft

Free Water During Drilling at:

Water at: 4.22 ft

Caving at:

ELEVATION/ DEPTH	SOIL/SAMPLER SYMBOLS & FIELD DATA	POCKET PEN. (tsf) or SPT	DESCRIPTION	TPH (mg/kg)	PID (ppm)	BTEX (mg/kg)
-0			Tan stabilized SAND "FILL" -w/ gravel Tan, gray, & red SANDY LEAN CLAY (CL) -gravel stops @ 2.5'		0	
- 5 - -	7 2222 2222		-light gray SANDY LEAN CLAY (CL) -trace remnants of sand Light gray SAND (SC) Boring terminated @ 6 ft		0	
- - 10 -						
- 15						
- 20 -						
- - 25 -						

Note(s): Water sample collected at 20:39

LOG OF BORING SB-04

Project: Big Star Property, 1800 East Frwy, Channel View, Harris County, TX **Project No.:** 11.12.014 Date: 6-1-11

Client: SJRF, P.O. Box 1559, Channelview, TX 77530

Elevation:

Coordinates: Lat. 29°47'45.5"

Long: 95°04'01.7"

Dry Augered: Washed Bored: 0 **to** 9 **f to** f

Free Water During Drilling at:

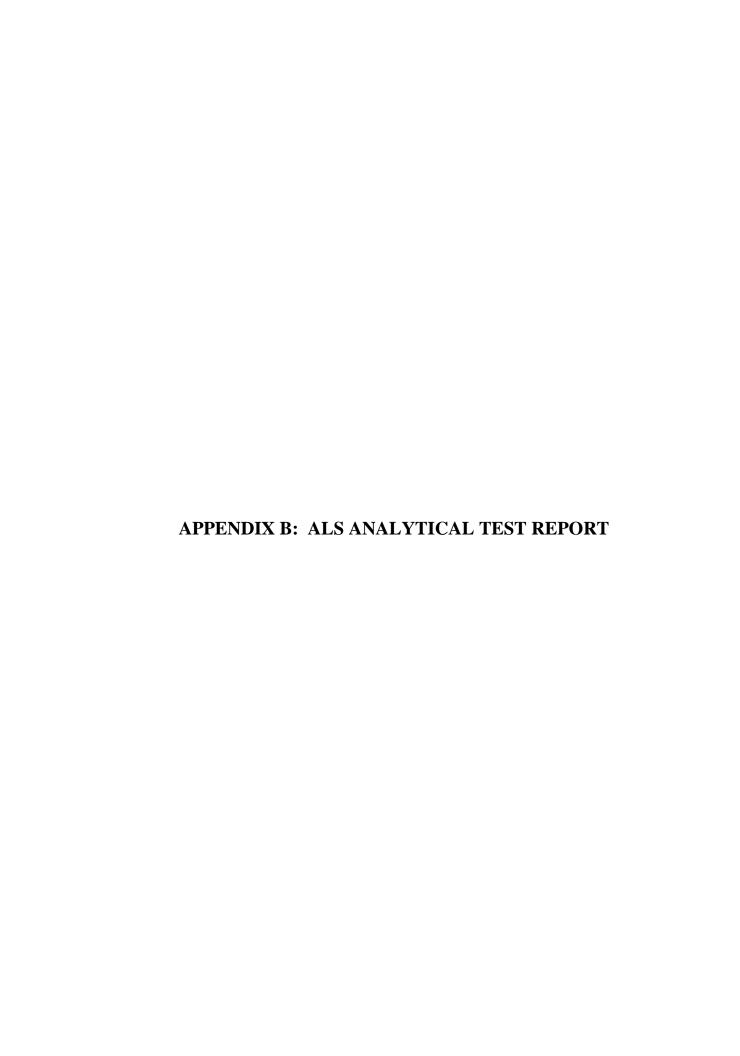
7 ft

Water at: 7.94 ft

Caving at:

ELEVATION/ DEPTH	SOIL/SAMPLER SYMBOLS & FIELD DATA	POCKET PEN. (tsf) or SPT	DESCRIPTION	TPH (mg/kg)	PID (ppm)	BTEX (mg/kg)
F 0	1		Tan stabilized SAND (SC) "FILL" -w/ gravel		0	
<u> -</u>			Red & dark gray SILTY CLAY (CL-ML)		0	
- 5 -			-dark gray & gray -strong natural organic odor		0	
-	*		Dark gray SAND (SM) -wet @ 7' -saturated @ 8'		0	
- 10	{{a a a a a a a a	. —	Boring terminated @ 9 ft			
-						
-						
- 15						
-						
- 20						
- -						
<u>-</u>						
- 25						
-						
L 30						

Note(s): Water sample collected at 20:54



ALS Environmental Date: 03-Jun-11

Client: Tolunay-Wong Engineers, Inc.

Project: 11.12.014 Big Star Work Order Sample Summary

Work Order: 1106038

Lab Samp II	Client Sample ID	<u>Matrix</u>	Tag Number	Collection Date	Date Received	Hold
1106038-01	SB-01	Water		6/1/2011 20:17	6/2/2011 07:55	
1106038-02	SB-02	Water		6/1/2011 20:26	6/2/2011 07:55	
1106038-03	SB-03	Water		6/1/2011 20:39	6/2/2011 07:55	
1106038-04	SB-04	Water		6/1/2011 20:54	6/2/2011 07:55	
1106038-05	Trip Blank	Water		6/1/2011	6/2/2011 07:55	

Client: Tolunay-Wong Engineers, Inc.

 Project:
 11.12.014 Big Star
 Work Order:
 1106038

 Sample ID:
 SB-01
 Lab ID:
 1106038-01

 Sample ID:
 SB-01
 Lab ID:
 1106038

 Collection Date:
 6/1/2011 08:17 PM
 Matrix:
 WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
LOW-LEVEL TEXAS TPH		Meth	od: TX1005		Prep: TX1	005PR / 6/2/11	Analyst: RPM
nC6 to nC12	U		0.19	0.49	mg/L	1	6/2/2011 14:12
>nC12 to nC28	U		0.19	0.49	mg/L	1	6/2/2011 14:12
>nC28 to nC35	U		0.19	0.49	mg/L	1	6/2/2011 14:12
Total Petroleum Hydrocarbon	U		0.19	0.49	mg/L	1	6/2/2011 14:12
Surr: 2-Fluorobiphenyl	95.6			70-130	%REC	1	6/2/2011 14:12
Surr: Trifluoromethyl benzene	106			70-130	%REC	1	6/2/2011 14:12
TCL VOLATILES		Meth	od: SW8260				Analyst: PC
Benzene	U		0.50	5.0	μg/L	1	6/2/2011 16:40
Ethylbenzene	U		0.50	5.0	μg/L	1	6/2/2011 16:40
m,p-Xylene	U		1.0	10	μg/L	1	6/2/2011 16:40
o-Xylene	U		0.50	5.0	μg/L	1	6/2/2011 16:40
Toluene	U		0.50	5.0	μg/L	1	6/2/2011 16:40
Xylenes, Total	U		1.0	15	μg/L	1	6/2/2011 16:40
Surr: 1,2-Dichloroethane-d4	93.5			70-125	%REC	1	6/2/2011 16:40
Surr: Dibromofluoromethane	96.6			71-125	%REC	1	6/2/2011 16:40
Surr: Toluene-d8	93.6			75-125	%REC	1	6/2/2011 16:40

Date: 03-Jun-11

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Tolunay-Wong Engineers, Inc.

Project: 11.12.014 Big Star **Work Order:** 1106038

 Sample ID:
 SB-02
 Lab ID: 1106038-02

 Collection Date:
 6/1/2011 08:26 PM
 Matrix: WATER

Date: 03-Jun-11

Report **Dilution Date Analyzed** Limit **Factor** Analyses Result Qual **MDL** Units Prep: TX1005PR / 6/2/11 **LOW-LEVEL TEXAS TPH** Method: TX1005 Analyst: RPM nC6 to nC12 U 0.20 0.49 mg/L 6/2/2011 15:48 >nC12 to nC28 U 0.20 0.49 mg/L 6/2/2011 15:48 1 >nC28 to nC35 U 0.20 0.49 mg/L 6/2/2011 15:48 1 Total Petroleum Hydrocarbon U 0.20 0.49 mg/L 6/2/2011 15:48 Surr: 2-Fluorobiphenyl 92.5 %REC 70-130 6/2/2011 15:48 1 Surr: Trifluoromethyl benzene 108 70-130 %REC 6/2/2011 15:48 Method: SW8260 TCL VOLATILES Analyst: PC Benzene U 0.50 μg/L 6/2/2011 17:06 5.0 1 Ethylbenzene U 0.50 5.0 μg/L 1 6/2/2011 17:06 m,p-Xylene U 1.0 10 μg/L 1 6/2/2011 17:06 0.50 o-Xylene U 5.0 μg/L 6/2/2011 17:06 1 Toluene U 0.50 5.0 μg/L 6/2/2011 17:06 Xylenes, Total U 1.0 6/2/2011 17:06 15 μg/L 1 Surr: 1,2-Dichloroethane-d4 98.6 70-125 %REC 6/2/2011 17:06 Surr: Dibromofluoromethane 100 71-125 %REC 6/2/2011 17:06 1 Surr: Toluene-d8 91.0 75-125 %REC 6/2/2011 17:06

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Tolunay-Wong Engineers, Inc.

Project: 11.12.014 Big Star **Work Order:** 1106038

 Sample ID:
 SB-03
 Lab ID:
 1106038-03

 Collection Date:
 6/1/2011 08:39 PM
 Matrix:
 WATER

Date: 03-Jun-11

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
LOW-LEVEL TEXAS TPH		Meth	od: TX1005		Prep: TX1	005PR / 6/2/11	Analyst: RPM
nC6 to nC12	U		0.19	0.48	mg/L	1	6/2/2011 16:20
>nC12 to nC28	U		0.19	0.48	mg/L	1	6/2/2011 16:20
>nC28 to nC35	U		0.19	0.48	mg/L	1	6/2/2011 16:20
Total Petroleum Hydrocarbon	U		0.19	0.48	mg/L	1	6/2/2011 16:20
Surr: 2-Fluorobiphenyl	82.1			70-130	%REC	1	6/2/2011 16:20
Surr: Trifluoromethyl benzene	98.6			70-130	%REC	1	6/2/2011 16:20
TCL VOLATILES		Meth	od: SW8260				Analyst: PC
Benzene	U		0.50	5.0	μg/L	1	6/2/2011 17:33
Ethylbenzene	U		0.50	5.0	μg/L	1	6/2/2011 17:33
m,p-Xylene	U		1.0	10	μg/L	1	6/2/2011 17:33
o-Xylene	U		0.50	5.0	μg/L	1	6/2/2011 17:33
Toluene	U		0.50	5.0	μg/L	1	6/2/2011 17:33
Xylenes, Total	U		1.0	15	μg/L	1	6/2/2011 17:33
Surr: 1,2-Dichloroethane-d4	96.8			70-125	%REC	1	6/2/2011 17:33
Surr: Dibromofluoromethane	102			71-125	%REC	1	6/2/2011 17:33
Surr: Toluene-d8	99.9			75-125	%REC	1	6/2/2011 17:33

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Client: Tolunay-Wong Engineers, Inc.

Project: 11.12.014 Big Star **Work Order:** 1106038

 Sample ID:
 SB-04
 Lab ID:
 1106038-04

 Collection Date:
 6/1/2011 08:54 PM
 Matrix:
 WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
LOW-LEVEL TEXAS TPH		Meth	nod: TX1005		Prep: TX1	005PR / 6/2/11	Analyst: RPM
nC6 to nC12	U		0.20	0.49	mg/L	1	6/2/2011 15:48
>nC12 to nC28	0.20	J	0.20	0.49	mg/L	1	6/2/2011 15:48
>nC28 to nC35	U		0.20	0.49	mg/L	1	6/2/2011 15:48
Total Petroleum Hydrocarbon	0.200	J	0.20	0.49	mg/L	1	6/2/2011 15:48
Surr: 2-Fluorobiphenyl	92.3			70-130	%REC	1	6/2/2011 15:48
Surr: Trifluoromethyl benzene	114			70-130	%REC	1	6/2/2011 15:48
TCL VOLATILES		Meth	od: SW8260				Analyst: PC
Benzene	0.85	J	0.50	5.0	μg/L	1	6/2/2011 17:59
Ethylbenzene	U		0.50	5.0	μg/L	1	6/2/2011 17:59
m,p-Xylene	U		1.0	10	μg/L	1	6/2/2011 17:59
o-Xylene	U		0.50	5.0	μg/L	1	6/2/2011 17:59
Toluene	U		0.50	5.0	μg/L	1	6/2/2011 17:59
Xylenes, Total	U		1.0	15	μg/L	1	6/2/2011 17:59
Surr: 1,2-Dichloroethane-d4	99.4			70-125	%REC	1	6/2/2011 17:59
Surr: Dibromofluoromethane	101			71-125	%REC	1	6/2/2011 17:59
Surr: Toluene-d8	91.2			75-125	%REC	1	6/2/2011 17:59

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Date: 03-Jun-11